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10/678,703	10/03/2003	Martin Ridgway Handforth	16127ROUS01U	9896

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EXAMINER	
DAVENPORT, MON CHERI S	

ART UNIT	PAPER NUMBER
2616	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	**Application No.** 10/678,703	**Applicant(s)** HANDFORTH ET AL.
	Examiner Mon Cheri S. Davenport	**Art Unit** 2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 29 August 2007.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-5,8-24 and 27 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) 1-5, 8-24, and 27 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 13 and 23 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding **claim 13**, now requiring "turn off the inter-mesh communication point when the battery level of the vehicle drops below a threshold value". This is subject matter which was not described in the original specification; therefore, new matter. Neither applicant has pointed out where in the original specification support for the subject addition can be found.

Regarding **claim 23**, now requiring "compensating an owner of a vehicle containing the first mobile inter-mesh communication point for permitting the first mobile inter-mesh communication point to transmit onto the first mesh networking level the data received from the second mesh networking level". This is subject matter which was not described in the original specification; therefore, new matter. Neither applicant has pointed out where in the original specification support for the subject addition can be found.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-5, 8-24, and 27** rejected under 35 U.S.C. 102(e) as being anticipated by Garahi et al. (US Patent Publication 2003/0091010).

Regarding **Claim 1** Garahi et al. discloses an mobile inter-mesh communication point, comprising ***(see fig. 3, paragraph [0024], wireless mobile access point):***

a first wireless mesh network port configured to operate utilizing at least one of the IEEE 802.11x standard ***(paragraph[0034], lines 7-9, 2 ISM band, the transceivers transmits and receive at any frequency band including 802.11x standards, any frequency band reads on 802.11x standard)***

to participate on a first level wireless mesh network ***(see fig. 3, section 134-1, transceiver 1, see paragraph[0037], line 2-3);*** and

a second wireless mesh network port configured to operate utilizing one t least one of the IEEE 802.16x standard ***(see paragraph[0034], lines 7-9, the transceivers transmits and receive at any frequency band including 802.16x standards, any frequency band reads on 802.16x standard)***

participate on a second level wireless mesh network***(see fig. 3, section 134-2, transceiver 2, see paragraph[0037], line 2-3)***.

Regarding **Claim 2** Garahi et al. discloses everything as applied above (*see claim 1*). In addition the mobile inter-mesh communication point includes:

wherein the first wireless mesh network port and the second wireless mesh network port are each part of separate network elements ***(see paragraph[0037], line 2-3, separate transceivers and separate antennas .***

Regarding **Claim 3** Garahi et al. discloses everything as applied above (*see claim 2*). In addition the mobile inter-mesh communication point includes:

further comprising a communication link between the separate network elements ***(see fig. 3, section 136-1, single processor, paragraph[0037], line 4-5, one single processor connecting the separate network elements).***

Regarding **Claim 4** Garahi et al. discloses everything as applied above (*see claim 1*). In addition the mobile inter-mesh communication point includes:

wherein the first wireless mesh network port and the second wireless mesh network port are part of one network element***(see fig. 3, paragraph[0037], lines 1-5, the network elements are all located on one single board computer control).***

Regarding **Claim 5** Garahi et al. discloses everything as applied above (*see claim 1*). In addition the mobile inter-mesh communication point includes:

further comprising switching/routing circuitry configured to interconnect said first wireless mesh network port with said second wireless mesh network port ***(see fig3. section 136-1, single processor, paragraph[0037], lines 1-5, all network elements are connect to the single processor control computer(which does the switching/routing)).***

Regarding **Claim 8** Garahi et al. discloses everything as applied above (*see claim 1*). In addition the mobile inter-mesh communication point includes:

further comprising an interface to a DC power supply ***(see paragraph[0037], lines 5-7, 12V DC power supply).***

Regarding **Claim 9** Garahi et al. discloses everything as applied above (*see claim 8*). In addition the mobile inter-mesh communication point includes:

wherein the interface to a DC power supply is configured to receive power from a vehicle power supply ***(see paragraph[0037], lines 5-7, 12V DC supply of the vehicle).***

Regarding **Claim 10** Garahi et al. discloses everything as applied above (*see claim 8*). In addition the mobile inter-mesh communication point includes:

further comprising a vehicle ***(see paragraph[0037], lines 11-12, mounted in a vehicle, example, city bus).***

Regarding **Claim 11** Garahi et al. discloses everything as applied above (*see claim 1*). In addition the mobile inter-mesh communication point includes:

further comprising a battery***(see paragraph[0037], see lines 5-7, external power supply 12V DC).***

Regarding **Claim 12** Garahi et al. discloses everything as applied above (*see claim 1*). In addition the mobile inter-mesh communication point includes:

further comprising a fuel cell***(see paragraph[0037], see lines 5-7, external power supply 12V DC).***

Regarding **Claim 13** Garahi et al. discloses everything as applied above (*see claim 1*). In addition the mobile inter-mesh communication point includes:

wherein the inter-mesh communication point is configured to be disposed in a vehicle***(see paragraph[0037], lines 11-12, mounted in a vehicle, example, city bus)***, said mobile inter-mesh communication point further comprising a battery discharge controller configured to monitor a battery level of the vehicle and turn off the inter-mesh communication point when the battery level of the vehicle drops below a threshold value. ***(See paragraph [0037], lines 5-7, 12V DC supply of the vehicle, which vehicles are equipped with vehicle battery monitoring systems, the communication point will turn off when the battery level is below a threshold point).***

Regarding **Claim 14** Garahi et al. discloses everything as applied above (*see claim 1*). In addition the mobile inter-mesh communication point includes:

wherein the inter-mesh communication point is disposed in an emergency vehicle***(see paragraph[0037], lines 11-12, mounted in a vehicle, example, emergency vehicle)***, and wherein the second wireless mesh network port is configured to generate priority traffic for transmission over the second wireless mesh network ***(see paragraph[0039], network includes a gate keeper, which can give priority to the second network).***

Regarding **Claim 15** Garahi et al. discloses a method of providing a dynamically adjusting mesh network topography, comprising:

enabling a first mesh networking level implemented using at least one IEEE 802.11x standard***(see fig. 3,section 134-1, transceiver 1, see paragraph[0037], line 2-3) paragraph[0034], lines 7-9, 2 ISM band, the transceivers transmits and receive at any frequency band including 802.11x standards, any frequency band reads on 802.11x standard)***;

enabling a mobile inter-mesh communication point to participate in the first mesh networking level ***(see paragraph[0041], lines 2, mobile access point aggregate traffic to the core LAN)*** ; and

permitting a first mobile inter-mesh communication point to transmit onto the first mesh networking level data received from a second mesh networking level implemented using at least one IEEE 802.16x standard***(see paragraph[0038], lines 9-12, the mobile access point utilize a self forming self healing radio access technology, that will allow the first communication point to transmit from a second level to prevent communication connection or loose of data packets, see paragraph[0040], lines 10-14) (see paragraph[0034], lines 7-9, the transceivers transmits and receive at any frequency band including 802.16x standards, any frequency band reads on 802.16x standard)*** .

Regarding **Claim 16** Garahi et al. discloses everything as applied above (*see claim 15*). In addition the method includes:

wherein the first mobile inter-mesh communication point is enabled to participate in the first mesh networking level as a relay point***(see paragraph[0039], line 9-11, mobile access point operate as a router enabling intercommunication between mobile terminal).***

Regarding **Claim 17** Garahi et al. discloses everything as applied above (*see claim 15*). In addition the method includes:

wherein the first mobile inter-mesh communication point is allowed to transmit onto the first mesh networking level while moving***(see paragraph [0042], line 1-3, mobile access points are moving at a relative constant rate).***

Regarding **Claim 18** Garahi et al. discloses everything as applied above (*see claim 15*). In addition the method includes:

further comprising selecting a second mobile inter-mesh communication point when the first mobile inter-mesh communication point moves away from users in the second mesh networking level ***(see paragraph[0038], lines 9-12, the mobile access point utilize a self forming self healing radio access technology, that will allow the first communication point to transmit from a second level to prevent communication connection or loose of data packets, see paragraph[0040], lines 10-14) .***

Regarding **Claim 19** Garahi et al. discloses everything as applied above (*see claim 15*). In addition the method includes:

further comprising establishing policy on the first mesh networking level; and requesting the policy to be implemented by the first mobile inter-mesh communication point ***(see paragraph[0039], network includes a gate keeper, which gives policy to the first network).***

Regarding **Claim 20** Garahi et al. discloses everything as applied above (*see claim 15*). In addition the method includes:

further comprising not permitting the first mobile inter-mesh communication point to transmit onto the first mesh networking level data if the first mobile intermesh communication point fails to implement the policy***(see paragraph[0038], lines 9-12, the mobile access point utilize a self forming self healing radio access technology, that will allow the first communication point to transmit from a second level to prevent communication connection or loose of data packets, see paragraph[0040], lines 10-14) .***

Regarding **Claim 21** Garahi et al. discloses everything as applied above (*see claim 15*). In addition the method includes:

further comprising enabling a mobile inter-mesh communication point to transmit a limited amount of self-generated data onto the first level mesh network***(see paragraph[0039], line 12-17, mobile access point can used in conjunction with mobile terminals, which will create self generated data).***

Regarding **Claim 22** Garahi et al. discloses everything as applied above (*see claim 15*). In addition the method includes:

further comprising selectively activating and deactivating the mobile inter-mesh communication point depending on where the inter-mesh communication point is in the first level mesh network in relation to a traffic density on the first level mesh network*(see paragraph[0038], lines 9-12, the mobile access point utilize a self forming self healing radio access technology, that will allow the first communication point to transmit from a second level to prevent communication connection or loose of data packets, see paragraph[0040], lines 10-14)* .

Regarding **Claim 23** Garahi et al. discloses everything as applied above (*see claim 15*). In addition the method includes:

further comprising compensating an owner of a vehicle containing the first mobile inter-mesh communication point for permitting the first mobile inter-mesh communication point to transmit onto the first mesh networking level the data received from the second mesh networking level *(see paragraph[0039], line 4-9, the network includes a AAA(authentication/authorization/accounting center, this center will be used to track all accounting including compensation).*

Regarding **Claim 24** Garahi et al. discloses everything as applied above (*see claim 15*). In addition the method includes:

wherein compensating comprises at least one of:

providing free access to the first mesh networking level; providing reduced fee access to the first mesh networking level; paying based on an amount of traffic handled by the inter-mesh communication point; and crediting an account associated with the inter-mesh communication point*(see paragraph[0039], line 4-9, the network includes a AAA(authentication/authorization/accounting center, compensation features(free access, reduced fee access, and crediting (accounting) are handled by the AAA center).*

Regarding **claim** 27 Garahi et al. discloses a vehicle, comprising *(see paragraph [0037], lines 11-12, mounted in a vehicle, example, city bus, see fig. 4, vehicle)*:

a system configured to allow the vehicle to move*(see paragraph[0037], lines 11-12, mounted in a vehicle, example, city bus, this inherent in most vehicles)*;

an electrical system*(see paragraph[0037], lines 11-12, mounted in a vehicle, example, city bus, this inherent in most vehicles)*; and

an inter-mesh communication system connected to the electrical system and configured to communicate on two orthogonal mesh networks, to communicate on two orthogonal mesh networks, the inter-mesh communication system comprising a first wireless mesh network port configured to operate utilizing at least one of the IEEE 802.11x standard to participate on a first level wireless mesh network implemented using the at least one 802.11x standard, and a second wireless mesh network port configured to operate, utilizing at least one of the IEEE 802.16x standard to participate on a second level wireless mesh network implemented using the at least one 802.16x standard, *(see fig. 4, section 146, vehicle and section 132, mobile access point, see paragraph[0025], lines1-3, mobile access point with two networks are attached to vehicle, (see fig. 3, section 134-1, transceiver 1, and section 138-1, antenna 1, (mesh network one) and*

section 134-2, transceiver 2, and section 138-2, antenna 2 (mesh network two)) (see paragraph[0034], lines 7-9, the transceivers transmits and receive at any frequency band including 802.16x standards and 802.11x, any frequency band reads on 802.16x standard and 802.11x).

Response to Arguments

3. Applicant's arguments filed 8/29/2007 have been fully considered but they are not persuasive.

In the remarks on pg. 6 of the amendment, the applicant contends that Garahi et al. does not teach or suggest "the use of IAPs as inter-mesh communication points". However, argument does not pertain to claims as presented.

In the remarks on pg. 8 of the amendment, the applicant contends that Garahi et al. does not teach or suggest "the use of two frequency bands or the use of one of IEEE 802.16x "

Examiner respectfully disagrees Garahi et al. teaches that the transceiver (including both 134-1 and 134-2) transmit and receive at any frequency band, which reads on both 802.11x as well as 802.16x, the transceivers operate at two different frequencies. See rejections of independent claims.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mon Cheri S. Davenport whose telephone number is 571-270-1803. The examiner can normally be reached on Monday - Friday 8:00 a.m. - 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MD/md
November 2, 2007

CHIRAG G. SHAH
PRIMARY PATENT EXAMINER